G 1097 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2015

Seventh Semester

Branch : Civil Engineering

CE 010 706 L02—GROUND IMPROVEMENT TECHNIQUES (Elective—II) [CE]

(New Scheme – 2010 Admission onwards)

[Improvement/Supplementary]

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*

Each question carries 3 *marks.*

1. Explain the effect on engineering properties on soil due to mechanical stabilization.
2. Discuss thermal stabilization.
3. Discuss the properties of grouts.
4. Explain the factors affecting earth reinforcement.
5. Write the classifications of geotextiles.

(5 × 3 = 15 marks)

Part B

Answer **all** *questions.*

Each question carries 5 *marks.*

1. Write a note on well point system.
2. Explain the effect of lime on soil properties.
3. Define stability, rigidity, thixotropy.
4. Explain the mechanism of earth reinforcement.
5. Discuss geotextiles as reinforcement.

(5 × 5 = 25 marks)

Turn over

Part C

Answer **all** *questions.*

Each question carries 12 *marks.*

1. (a) Write a note on well point system and Electro Osmosis.

Or

(b) Discuss in brief selection improvement method.

2. (a) Write a brief note on thermal stabilization and Electrical Stabilization.

Or

(b) Discuss in detail the stabilization process of lime Soil.

3. (a) Explain the classification of suspension grout and solution grout.

Or

(b) Explain the stabilization of grouting for under pinning and other applications.

4. (a) Write a note on design theory of retaining Wall.

Or

(b) Explain the role of geotextiles as reinforcement and separators.

5. (a) Explain the role of geotextiles in Soil improvement.

Or

(b) Write a brief note on earth reinforcement and discuss its mechanism.

(5 × 12 = 60 marks)